Maine DEP

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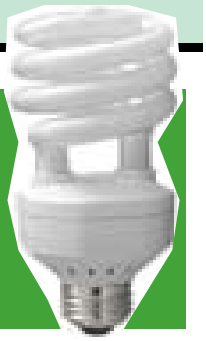
Toxics and P2 News



Efficiency Maine For Small Businesses

In 2002, the Maine legislature passed a law titled "An Act to Strengthen Energy Conservation." This law was designed to educate and assist Maine consumers and small businesses in purchasing energy efficient technologies.

The education component consists of increasing awareness of energy efficient technologies by giving retailers incentives to do more advertising and allowing them to offer rebates which would generate more customers. The Efficiency Maine website also offers information on both participating retailers and rebates for consumers, as well as information on how retailers can participate.

The assistance component is for businesses who would like some financial assistance making their facilities more energy efficient by switching out older technologies for newer ones. Efficiency Maine also provides technical assistance by training businesses to use self -survey tools, allowing them to evaluate and identify energy saving opportunities. They also give specific product and retailer information regarding which systems to purchase and where to find them.

Cash incentives are offered on qualified lighting, HVAC equipment, LED and solid-state exit lights, NEMA Premium™ energy efficient motors, and system controls!

For more information on Efficiency Maine's Small Business Program Incentives, call 866-376-2463 or visit their website at:

www.efficiencymaine.com/smallbusiness/

Case Study: Efficiency at Work in the State of Maine

In September, DEP's Toxics Program decided to purchase 30 energy-efficient compact fluorescent bulbs (cfls) and replace 30 incandescent bulbs that existed in the AMHI and DEP Campus tunnel system. Due to safety concerns, these lights were left on 24 hours a day, 7 days a week. We replaced mostly 67 watt incandescent bulbs with either 15, 20, or 23 watt cfls. The cfls produced more light even though the wattage was far less!

We figure the total savings to be about **$800 dollars per year**, a 2 month payback!!

Need Employee Suggestions?

A required component of a Pollution Prevention (P2) plan includes a section on employee involvement. Many companies have struggled with getting their employees to contribute ideas.

If you are having difficulty getting suggestions from employees on ways to reduce your use and release of toxic chemicals or generation of hazardous waste, you are not alone. Many companies are good at getting the information about the P2 Plan out to employees and letting them know that their input is valuable, but many do not get suggestions back.

Having completed over 60 P2 Plan inspections, we have seen many good ideas, the ones being the most popular are the incentives programs. Most people, before they contribute ideas, want to know "what's in it for me". The incentives let them know that they will benefit from an idea, and possibly even more so if the company ends up saving cash.

Employees that suggest ideas are rewarded with such items as:

- **Caps, T-shirts, or sweatshirts**
- **Gift certificates/movie passes**
- **Money, or paid time off**

For suggestions that save money, some employees are actually given a portion of the savings!

Even the simplest idea can save a company thousands of dollars a year!

Updated Website!

The Toxics Program is pleased to announce that we have redesigned our website and have a new look! Updated information and some new information is on the Web in an easy to navigate forum. Please check it out and feel free to send us any comments: **www.state.me.us/dep/oia/thwrp/index.htm**

P2 Program Update

P2 Technology and Demonstration Day!

The P2 Program held a technology demonstration day on August 12 at the University of Maine's Advanced Wood Engineering Composites Laboratory. This demonstration day focused on both fiberglass and composites manufacturing with participants including boat builders and composites manufacturers. Demonstrations set up by vendors showcased products which prevented pollution.

Traditional materials used in fiber glassing and composites work can lead to the generation of hazardous waste and emissions of volatile organic compounds (VOCs). VOCs create the formation of ground level ozone, causing degradation of the environment and potential respiratory ailments. The materials that were demonstrated for the participants included currently available non-hazardous alternatives for acetone, low VOC gel coats and resins, non-atomizing spray equipment, controlled spray technology and vacuum infusion systems.

This demonstration day capped a year long assistance effort focusing on the composites industry, which is one of the fastest growing industries in Maine.

Maine DEP also hosted the Multi State Work Group (MSWG) meeting in Portland on September 15 and 16. The MSWG is an organization that convenes government, non-government, business and academic interests to conduct research, promote dialogue, create networks and establish partnerships that improve the state of the environment, economy and community, through systems-based public and private policy innovation. The MSWG is the country's premier organization for addressing EMS/ISO 14001 and environmental performance issues.

The P2 Program recently attended an Environmental Management Systems (EMS) training facilitated by one of the MSWG's directors, Peter Wise of Kestrel Management. The P2 Program is beginning an intense assistance based initiative, offering EMS implementation assistance to a small number of organizations and facilities in Maine.

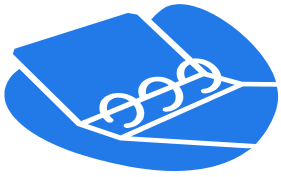
For more information regarding the ongoing activities of the P2 Program, contact Peter Cooke at 287-7100 or peter.cooke@maine.gov

P2 Plan Inspections

The Toxics Program has had another busy summer, this year we have had the opportunity to do something a little different. We have been conducting onsite Pollution Prevention (P2) plan inspections.

Remember, if you report biennially to the Toxics Program, you were required to have a P2 plan onsite by 01/01/00 and update it every 2 years.

Components of a P2 plan required for your plan to be deemed complete are taken right from the Toxics Law (Refer to Section 2305):



- A management policy
- Production unit analysis with identification of P2 techniques and cost accounting
- A strategy and schedule for implementing reduction options
- Facility goals
- Internal plan approval
- Employee involvement and training

Facilities that had missing components were given Letters of Warning (LOW) and technical assistance from our staff on how to make the P2 Plan complete.

We discovered a wide range of situations during our site visits, including complete plans, incomplete plans, and even no plans at all.

We will continue to conduct onsite inspections to review plans and assist regulated facilities to not just come into compliance, but to be continually looking into new ways to improve both their bottom line and the environment through pollution prevention!

To have your plan inspected voluntarily contact Jim Rodrigue at 287-8867 or email it to him at :

james.n.rodrigue@maine.gov

Attention Ammonia Users!

The Toxics Program recently received new information regarding the reporting of ammonia to the EPA's Toxics Release Inventory (TRI), and consequently, to the DEP's Toxics Program. Effective reporting year 2004, you only need to report ammonia if you **ADD** more than 10,000 lbs. to your system in the reporting year, not if you just **HAVE** more than 10,000 lbs. in your system. For more information, contact Jim Rodrigue at 287-8867 or james.n.rodrigue@maine.gov

Green Shop

Small Business Assistance Program: Clean Shop Initiative

DEP's Small Business Assistance Program (SBAP) will be conducting a focused compliance and P2 assistance effort, targeting the auto body/auto repair industry during 2004 - 2005. Maine contains over 4,000 registered motor vehicle and repair shops, according to the 1997 US Economic Census (www.census.gov). This is a significant amount of facilities, mostly occurring in densely populated areas that are classified by air quality data as non-attainment areas.
The main focus of our project would be to:

- Target air quality non-attainment areas
- Focus on reducing VOC's that lead to ground level ozone
- Focus on energy reductions to reduce green house gas emissions
- Focus on proper handling of all materials to eliminate potential release to the environment
- Focus on worker exposure, health and safety**,** including the life cycle of materials at the work place and being carried home
- Focus on alternative, proven pollution prevention technologies, including parts washers and cleaners
- Use incentive tools including a 2 tiered certification program including performance measurements:

1) Clean Shop – certified in compliance

2) Green Shop – certified beyond compliance – facility employs pollution prevention and sustainability technologies and concepts

- Provide Environmental Management System (EMS**)** training and oversight mainly utilizing EPA's Practical Guide to Environmental Management for Small Businesses

For more information regarding this project**,** please contact Julie Churchill at 287-7881 or email:

julie.m.churchill@maine.gov

Parts Washer Project

Tired of washing your automotive parts in a cold, hazardous, expensive, and dangerous petroleum solvent? Here's some good news. The Toxics Program probed deeper into the available alternatives that exist for solvent parts washers. There are several types, such as ultrasonic and citrus based, but our main focus was on the aqueous based.

Aqueous based parts washers use a combination of heat and surfactant-containing detergents that "lift" the grease off the parts instead of dissolving it. There are also bioremediation units that have microbes added that will eat the removed oils and essentially clean the cleaning solution, making it last much longer!

Our project involved 2 facilities who currently use aqueous parts washers and 1 that used a solvent washer.

Our goal was to have the solvent user try an aqueous unit, then test all 3 aqueous units to see if the waste streams were hazardous. Two of the units were the bioremediation type, so their waste was a big filter that traps dirt, grit, and the item of concern, heavy metals like lead and chromium. The other unit was an enclosed high pressure "dishwasher" unit that had a similar waste stream but without the filter. The potentially hazardous sediment settles at the bottom of the "dishwasher".

We tested the bioremediation filters for TCLP metals and volatiles and the "dishwasher" sediment for just TCLP metals.

Our goal was to educate the facilities in the proper use and **regular** maintenance of these machines, and to ensure that no hazardous solvents were ever **introduced into** the liquid.

Experience has shown that the more the parts were manually scraped **before** entering the parts washer, the less likely the solution would get contaminated and the longer it would last.

Testing demonstrated that when the aqueous parts washers were used and maintained according to manufacturer specifications, the waste filters and sediment tested non-hazardous.

Once a facility uses an aqueous parts washer for a certain length of time and has the waste tested and determined non-hazardous, maintaining these same business practices for the same length of time will result in not having to test the waste each time.

For more assistance, please call the Small Business Compliance Incentives Policy (SBCIP) at 207-287-7881.

Maine DEP

Department of Environmental Protection
State House Station # 17
Augusta, ME 04333

RETURN SERVICE REQUESTED

LOOK INSIDE

for
Important Toxics and Hazardous Waste Reduction Program News!

- Energy Efficient Technologies for Small Businesses
- Necessary components of a complete Pollution Prevention (P2) plan
- SBAP Clean Shop Initiative
- Toxics Program's Parts Washer Project
- New Air Emission Regulations for Rock Crushers

Printed on 100% recycled content paper with soy based inks.

ATTENTION ROCK CRUSHERS!

DEP will be assisting rock crushing facilities in understanding new air emission regulations, due to the type of pollution rock crushers create, called particulate matter (PM). PM are tiny pieces of rock and dust, which become airborne during the rock crushing process. The issue with PM is what happens when this dust is inhaled.

Depending on the size, these small particles have the ability to lodge themselves in the small cavities in lungs which assist in transporting oxygen from the air into our bloodstream so we can function. The sizes of concern are anything smaller than 10 microns, also called PM-10. The diameter of a human hair is about 75 microns for comparison. Some of the health problems from exposure to PM-10 are effects on breathing and respiratory systems like asthma, damage to lung tissue, cancer, and premature death.

The act of crushing rocks without proper watering of the site to control the dust, will create quantities of PM that are health concerns to local communities that inhale them.
With close to 300 licensed rock crushing units in Maine, the DEP is looking to do some in-house visible emission (VE) training for DEP staff and rock crusher operators so they can be in compliance with **40 CFR Part 60 Subpart 000.**

This section of the law states that to be in compliance with the Subpart, operators of fixed crushers with a capacity greater than 25 tons per hour, or portable crushers with a capacity greater than 150 tons per hour, must either:

1) keep a log of all parts replaced on the rock crusher since it was placed in service, or
2) have a one time performance test (VE) performed on the unit to demonstrate the unit can meet an opacity limit of 10% or less.

Please call 1-800-789-9802 for free compliance assistance!